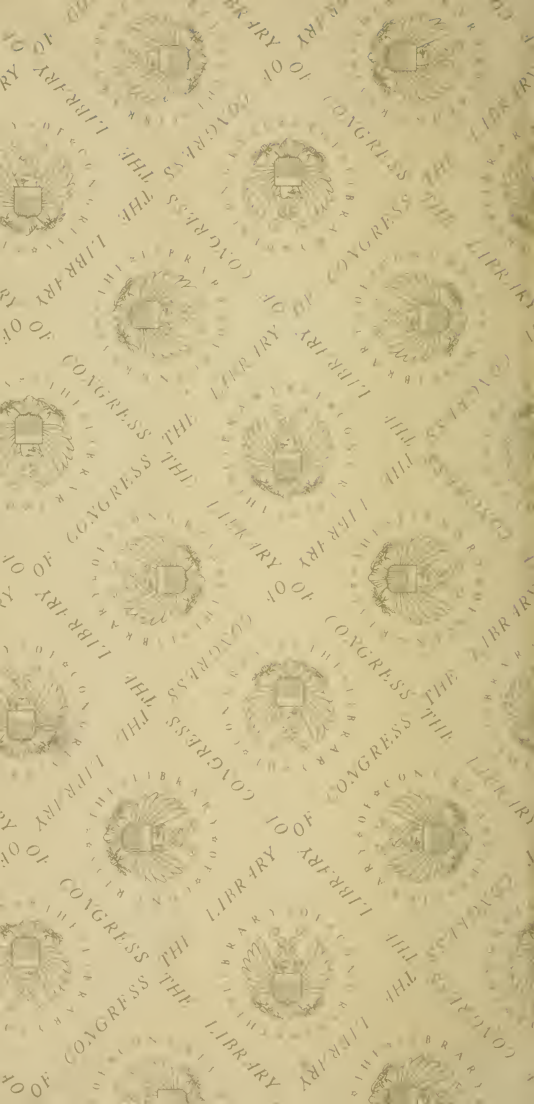
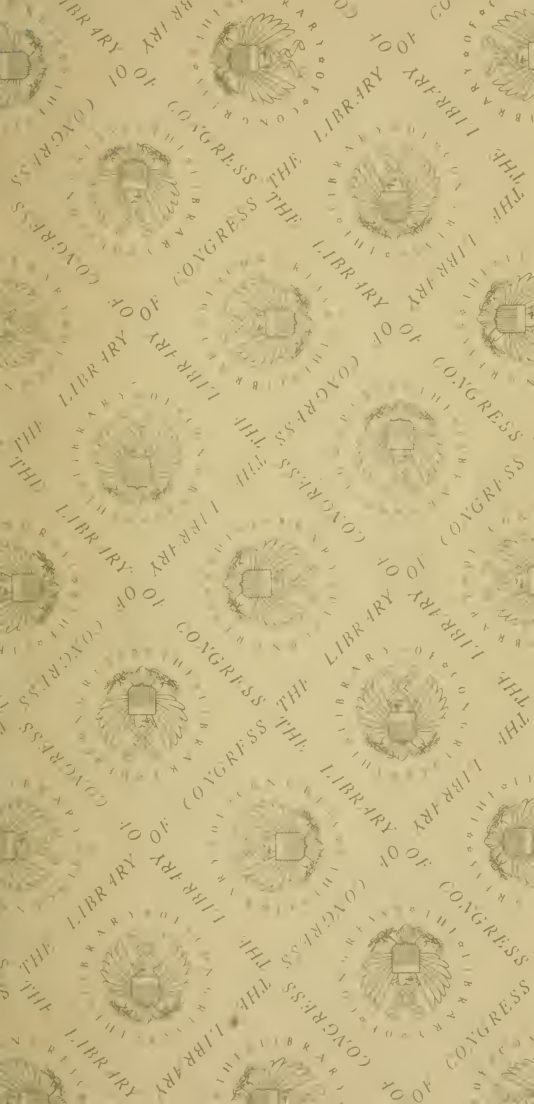


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The Home Chemist



A KEY TO HONEST WEALTH

By



PROF. DUKE H. BASHFORD

MANUFACTURING AND
ANALYTICAL CHEMIST

Author of "Standard Formulas "

"Syrups and Ciders ;" "Drinking Water ;"

"Extracts and How to Make Them ;"

"Assaying Made Easy ;" Etc., Etc.



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INTRODUCTION.

The author of this little but valuable book has had 30 years of practical experience in Europe and the United States, in almost every branch of manufacturing and analytical chemistry.

His chief aim in this work is to write a book for the masses, a book in common every-day plain English, and free from technical language. A large majority of the formulas are entirely new and now published for the first time.

Many of the formulas in this little work have sold for several hundred dollars each, in fact, will prove nuggets of gold in the hands of any intelligent man, woman or child, and will prove a pleasure as well as a profit.

THE AUTHOR.

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WATER.

As we know, water is widely distributed over the earth, we never find it perfectly pure. All natural waters contain foreign substances in solution. These substances are taken up from the air or from the earth.

Good drinking water should be free from color, taste and smell, transparent and without deposit. There is no simple process whereby the quality of a water may with certainty be ascertained.

A rough proximation may be arrived at, by taking the weight of the dried residue, and by the effect of incineration of its color. The permissible amounts of impurities in good drinking water, are as follows:

PARTS PER MILLION

Total residue by evaporation	.	500.
Chlorine in Chlorides	. .	.15.
Oxygen consumed	. . .	2.
Nitrogen as free Ammonia	.	.02
Nitrogen as Albuminoid Ammonia	.	.05
Nitrogen as Nitrites	. .	none
Nitrogen as Nitrates	. .	15.

It has been fully established, that the wells in cities and towns are contaminated, owing to their proximity to sewers and drains and above all cess-pools.

Through impure water the ova of various intestinal worms and other entozoa are introduced into the system and prove a fruitful cause of the production of, diarrhoea, dysentery, malarial fevers, ague, typhoid fever, diphtheria, cholera, calculi, etc.

Good water taken in quantities to satisfy the thirst acts only beneficially, indeed an excess will not hurt, for it is quickly absorbed, and increasing the blood pressure, favors digestion by thus inducing a free flow of the faeces. It is a digestive agent as well as food. By the liberal use of water as a beverage, the faeces are rendered of proper consistency, the intestines maintain their normal activity, and constipation is avoided. The result of the ingestion of pure water tends to keep the kidneys clean of concretions and morbid changes, and with

the skin and lungs equally active the bodily house is well swept.

Where ever water is suspected of being contaminated it should be boiled. A better way would be to boil it and when cool, or nearly so, filter it through filter paper.

While a glass funnel is the best, a tin one will do fairly well, and your druggist will show you how to fold the filter paper. There are many styles of filters on the market, they all claim to be germ proof but are not.

All living things contain a large proportion of water, which can be driven off by heat.

The proportion of water in animal and vegetable substances is very great.

If the body of a man weighing 150 pounds was placed in an oven and thoroughly dried, there would be left only about 50 pounds of solid matter, all the rest being water. When you purchase a roast of beef weighing eight pounds, you pay for about six pounds of water and two pounds of solid matter.

The many varieties of mineral springs have their origin in the presence in the earth of certain substances which are soluble in water, common salt occurs in large quantities in different parts of the earth. As it is soluble in water, many streams and springs contain it.

Effervescent waters are such as contain some gas, usually carbonic - acid gas. Chalybeate water contains some compound of iron.

Sulphur-water contains a compound of hydrogen and sulphur, called hydrogen sulphide or sulphuretted hydrogen. Water is composed of hydrogen, 2 parts by weight and 16 parts of oxygen.

TO SOFTEN WATER.

The housewife is often greatly troubled because of the hardness of the water she uses for domestic purposes.

The following formula will be found to work like a charm and rob wash day of half its terrors.

Potash Carbonate	.	4 ounces
Boiling Water	.	1 gallon

Dissolve, and add about one tablespoonful to each gallon of water. Clothes washed in water containing the above preparation will be nice and white, and will not shrink.

MILK.

Milk is the fluid secreted by the mammary glands of the division of vertebrate animals called Mammalia.

The milk of various domestic animals is more or less used by man for food. The milk of the cow, which may be taken as typical of all others, is indeed by far the most valuable of all.

Pure milk when newly drawn, is an opaque, white fluid with a yellow tinge and sweet to the taste.

There should be a faint animal odor, due to the presence of sulphuretted hydrogen.

The specific gravity of milk should be
 between . 1.03. and 1.035.
 Water . 86.87. Fat 3.5.
 Casene and Albumen . 4.75.
 Sugar . 4. Ash 7. $\frac{1}{2}$
 or 87 parts water and 13 parts solids.

When allowed to stand for a time, the lactic sugar which it contains, decomposes into lactic acid. This transformation is quite simple, consisting in the splitting up of the molecules of sugar into lactic acid. When water is added to milk, the specific gravity becomes lower.

In testing milk the lactometer alone is of no value. The quantity of cream varies from 8 to 20 per cent., but should not fall below 10 per cent.

Where the per cent. of cream is low, also the specific gravity, there is little reason to doubt the milk being adulterated. Milk containing less than 11 per cent. of solids should be looked upon as adulterated.

There are very few milk dealers who do not adulterate the milk they sell in

some way or other. Among the adulterants may be mentioned: Water, Cotton Seed Oil, Milk Sugar, Salicylic Acid, Borac Acid, Boracic Acid, Benzooric Acid, Benzooric Ether, Borax, Bi-carbonate Soda, Magnesia, Lime, Amyl Acitrate, Caramel and Aniline.

A number of these preparations are Antiferments, and are used to keep the milk from souring. But they all retard digestion and are bad, to say the least, and in the writer's opinion, more than half the ailments children suffer with, are caused by impure milk.

In cities and large towns, thousands of gallons of milk are sold that never saw a cow. To-day there are men going about the country offering for sale formulas for making bogus mllk. As high as five hundred dollars is asked and received for one of these formulas.

In the windows of many restaurants in cities are placed signs something like this:

We serve cream with our coffee for five cents per cup.

BOGUS CREAM.

The formula here given makes a very good imitation cream, and is perfectly wholesome, and may be given to children without any danger whatever. In fact it makes a good wholesome diet.

Milk	.	.	.	1½ gallon.
Corn Starch	.	..		1 ounce.
Eggs	.	.	.	1

Boil the milk, and allow to cool. Mix the starch with one pint of cold water. Beat egg well, and mix together.

CIDERS.

Cider when made from fruit and fresh from the press, is a nice thirst quenching and palatable beverage.

But it is safe to say, for every gallon of genuine cider sold, there are one thousand gallons of bogus placed upon the market. Imitation ciders may be manufactured that are good wholesome beverages, and taken in quantities to satisfy the thirst, are not harmful. But the bulk of the artificial product con-

tains material that makes it unfit for use as a beverage. Sweet cider fresh from the press contains no alcohol, but as it ages alcohol is formed. Hard cider contains 8 per cent. alcohol or twice as much as the highest grade of beer.

In imitation ciders as no alcohol forms, a certain per cent. of alcohol is placed in, that is where they are expected to produce a heady feeling. We give some formulas which may be used without danger and contain no alcohol.

APPLE CIDER.

Water	.	.	.	1 gallon
Simple Syrup	.	.	.	1 quart
Acid Solution	.	.	.	1 ounce
Sugar Coloring	.	.	.	1 teaspoonful

Stir well and it is ready for use.

ORANGE CIDER.

Water	.	.	.	1 gallon
Simple Syrup	.	.	.	1 quart
Acid Solution	.	.	.	1 ounce
Essence of Orange	.	.	.	$\frac{1}{2}$ ounce
Sugar Coloring	.	.	.	$\frac{1}{2}$ teaspoonful

Stir well.

The above makes a most delicious beverage and costs less than ten cents per gallon.

PEAR CIDER.

Water	.	.	.	1 gallon
Simple Syrup	.	.	.	1 quart
Acid Solution	.	.	.	1 ounce
Essence of Pear	.	.	.	$\frac{1}{2}$ teaspoonful

Color straw color with sugar coloring.

CHERRY CIDER OR PHOSPHATE.

Quite a number of samples of cherry phosphate and cherry cider, have been sent to us at different times for analysis and we found nearly all of them to contain poisonous matter, such as Sulphuric Acid, artificial oil of bitter almonds and Aniline coloring.

The formula here given is perfectly safe and will always give satisfaction.

Water	.	.	.	1 gallon
Simple Syrup	.	.	.	1 quart
Acid Solution	.	.	.	1 ounce
Extract of Wild Cherry Bark				$\frac{1}{4}$ ounce

Color red with vegetable coloring.

Of course coloring ciders does not add to their flavor, only they look much nicer.

IMITATION LEMONADE.

A most delicious beverage and can not be told from the genuine article.

Water	.	.	.	1 gallon
Simple Syrup	.	.	.	1 quart
Acid Solution	.	.	.	1½ ounce
Essence of Lemon	.	.	.	½ ounce

Mix and it is ready for use.

ROOT BEER.

Water	.	.	.	1 gallon
Simple Syrup	.	.	.	1 quart
Essence of Root Beer	.	.	.	1 teaspoonful
Acid Solution	.	.	.	¼ ounce
Sugar Coloring	.	.	.	½ ounce

Mix and you have a delightful and healthful drink.

COMPOUND SYRUPS FOR SODA WATER.

LEMON SYRUP.

Simple Syrup	. .	1 quart
Acid Solution	. .	$\frac{1}{2}$ ounce
Soluble Extract of Lemon		$\frac{1}{2}$ ounce

Pour two or three tablespoonsful into a glass, fill two-thirds full with water, stir and drink.

If desired a small amount of Bicarbonate of Soda may be added which will cause it to effervess.

ORANGE SYRUP.

Simple Syrup	. .	1 quart
Acid Solution	. .	$\frac{1}{4}$ ounce
Soluble Extract of Orange		$\frac{1}{2}$ ounce

Use the same way as Lemon.

VANILLA SYRUP.

Simple Syrup	. .	1 quart
Acid Solution	. .	1 teaspoonful
Extract of Vanilla	. .	$\frac{1}{2}$ ounce
Sugar Coloring	. .	1 teaspoonful

Mix, use same as Lemon.

CHERRY SYRUP.

Simple Syrup	.	.	1 quart
Acid Solution	.	.	$\frac{1}{4}$ ounce
Extract of Wild Cherry Bark			$\frac{1}{2}$ ounce
Vegetable Red Coloring			$\frac{1}{4}$ ounce

Mix, use same as Lemon.

SACCHARINE.

Saccharine is a product made from coal tar and was discovered by Fahlberg a few years ago.

The name is a mis-nomer however, as Saccharine means sugar, while this product is more properly speaking a spice. Refined Soluble Saccharine is over five hundred times as sweet as the best cane sugar.

One ounce being equal to 35 pounds of the best granulated sugar in sweetning power.

At the present price of sugar and Saccharine, where the latter can be used the saving is very great.

One pound Saccharine	.		\$ 7.50
One barrel Sugar	.	.	\$18.75
A saving of	.	.	\$11.25

Saccharine is used largely in Syrups, Jellies, wines and carbonated beverages, also artificial ciders, etc.

In diseases of the bladder and kidneys, Saccharine may be used with good results.

SACCHARINE SYRUP No. 1.

Boiling water . . .	1½ gallons
---------------------	------------

Saccharine . . .	¼ ounce
------------------	---------

Stir until dissolved.

Makes 6 quarts syrup at a cost of about 12 cents

If sugar was used in the place of Saccharine, the cost would be:

Sugar 8 pounds . . .	48 cents
----------------------	----------

Water 1 gallon

The above syrup may be used for tea, coffee, cider, soda water, root beer, etc.

In mixing this syrup an earthenware vessel is best.

SACCHARINE SYRUP No. 2.

Boiling water . . .	1 gallon
---------------------	----------

Saccharine . . .	¼ ounce
------------------	---------

Stir until dissolved.

GLUCOSE.

Glucose is made by boiling corn starch in a weak solution of sulphuric acid and then treating it with lime to neutralize the acid. Where glucose is made in a proper manner, it makes a wholesome food.

We have examined many samples of glucose and found quite a number of them contained free sulphuric acid to an alarming extent. Glucose is used largely in the manufacture of syrups, jellies, honey, candy and beer. Many preparations known as malt extracts and foods for producing fat are nothing more nor less than glucose in some form or other.

GLUCOSE SYRUPS.

Glucose not being as sweet as cane syrups Saccharine is added to supply the difference.

COMMON SYRUP.

Glucose (the best)	.	15 pounds
Cold Water	. .	1 gallon

Salicylic acid solution 1 teaspoonful
Mix well, costs 15 cents per gallon.

COMMON SYRUP No. 2.

Glucose . . .	15 pounds
Water . . .	1 gallon
Salicylic acid solution	1 teaspoonful
Sugar coloring . .	1 ounce
Saccharine syrup .	1 quart

HONEY SYRUP.

Glucose . . .	15 pounds
Saccharine syrup .	1 gallon
Sugar coloring . .	1 ounce
Extract vanilla . .	1 teaspoonful

Mix.

The above syrup will give good satisfaction wherever used, and costs about 30 cents per gallon.

NEW ORLEANS SYRUP.

Glucose . . .	15 pounds
Common cane molasses	$\frac{1}{2}$ gallon
Water . . .	1 gallon
Saccharine syrup .	1 gallon
Extract vanilla . .	$\frac{1}{4}$ ounce

Mix well.

BOGUS HONEY.

Glucose	15 pounds
Saccharine syrup No. 2.	1 gallon
Salicylic acid solution	$\frac{1}{4}$ ounce
Essence of Rose .	$\frac{1}{4}$ ounce

BOGUS HONEY No. 2.

Glucose	15 pounds
Saccharine syrup No. 2.	1 gallon
Salicylic acid solution	$\frac{1}{4}$ ounce
Strained honey .	1 quart

SUGAR SYRUPS.

The formulas given under this head are standard, pure and wholesome and should be in every household.

SIMPLE SYRUP.

Cold water	1 gallon
Granulated sugar .	10 pounds

Stir until dissolved and strain through cloth.

GOLDEN SYRUP.

Cold water	1 gallon
Granulated sugar	12 pounds
Stir until dissolved, then add	
Sugar coloring	¼ ounce
Extract of vanilla	1 teaspoonful
Strain.	

IMITATION HONEY.

Pure and wholesome.

In kettle over fire,

Water	1 gallon
Granulated sugar	15 pounds
Honey in comb	1 pound

Bring to a boil, stir a very little and strain through cloth.

The house wife who makes the above, will discover that it is superior to much of the so-called honey she has used.

MAPLE SYRUP.

In kettle over fire,

Water	1½ gallon
Granulated sugar	12 pounds

Powdered or crushed red oak bark

. 4 ounces

Boil 20 minutes and strain through cloth while hot.

CARAMEL OR SUGAR COLORING.

In kettle over fire,

Granulated sugar 1 pound

Allow to burn black, but not to a crisp, then add, hot water 1 pint and boil until as thick as syrup and strain through cheese cloth.

IMITATION JELLIES.

The amount of bogus jelly consumed in this country, is simply enormous, and the most of it is not fit to be used for food.

These vile compounds are composed of glucose, saccharine, acids, factitious extracts and poisonous coloring matter, and while they are bad enough for a grown up person to eat, they are much worse for children.

We give a few formulas for jellies made from glucose that are not harmful in small quantities.

APPLE JELLY.

Glucose	. . .	1 quart
No. 2 Saccharine syrup.		1 pint
Acid solution	. .	$\frac{1}{4}$ ounce
Extract apple or apple ether		10 drops
Mix well.		

STRAWBERRY JELLY.

Glucose	. . .	1 quart
No. 2 Saccharine syrup.		1 pint
Acid solution	. .	1 teaspoonful
Extract of strawberry		$\frac{1}{2}$ teaspoonful
Red coloring enough to bring it to the proper shade, mix well.		

BANANNA JELLY.

Glucose	. . .	1 quart
No. 2 Saccharine syrup		1 pint
Acid solution	. .	1 teaspoonful
Extract of Bananna		$\frac{1}{2}$ teaspoonful
Mix well.		

PEAR JELLY.

Glucose	. . .	1 quart
No. 2 Saccharine syrup.		1 pint
Acid solution	. .	$\frac{1}{4}$ ounce
Extract of pear	. .	$\frac{1}{2}$ teaspoonful

CHERRY JELLY.

Glucose . . . 1 quart

No. 2 Saccharine syrup. 1 pint

Acid solution. . . $\frac{1}{4}$ ounce

Extract of Cherry Bark . 1 teaspoonful

Color with red coloring, mix well.

BLACKBERRY JELLY.

Glucose . . . 1 quart

No. 2 Saccharine syrup 1 pint

Acid solution . . . $\frac{1}{4}$ ounce

Extract Blackberry . $\frac{1}{2}$ teaspoonful

Color with sugar coloring.

ACID SOLUTION.

The acid solution here given, is a standard one and may be used without any danger.

Citric acid . . . 2½ ounces

Tartaric acid . . . 2½ ounces

Hot water . . . 8 ounces

Stir until dissolved, then add,

Dilute Phosphoric Acid $\frac{1}{4}$ ounce

ESSENCE.

The essences and extracts spoken of in this work, may be procured at any good drug store.

ESSENCE OF LEMON.

Good oil of Lemon	.	.	1/4 ounce
Alcohol	.	.	4 ounces
Shake well.			

ESSENCE OF ORANGE.

Oil of Orange	.	.	1/4 ounce
Alcohol	.	.	4 ounces
Shake well.			

ESSENCE OF PEAR.

Acetic Ether	.	.	30 drops
Amyl Acitrate	.	.	1/4 ounce
Glycerine	.	.	1/4 ounce
Alcohol	.	.	2 ounces
Mix.			

ESSENCE OF ROOT BEER.

Alcohol	.	.	4 ounces
Oil of Sassafras	.	.	1/4 ounce
Oil of Winter green	.	.	1/2 ounce
Mix.			

ESSENCE OF SALICYLIC ACID

(OR SALICYLIC SOLUTION.)

Alcohol	.	.	.	5 ounces
Salicylic acid	.	.	.	$\frac{1}{2}$ ounce
Mix.				

ESSENCE OF ROSE.

Oil of Rose	.	.	.	10 drops
Alcohol	.	.	.	1 ounce
Shake well.				

APPLE ESSENCE.

Alcohol	.	.	.	2 ounces
Chloroform	.	.	.	10 drops
Nitrous Ether	.	.	.	10 drops
Aldehyd	.	.	.	20 drops
Acetic Ether	.	.	.	10 drops
Amyl Valleriante.	.	.	.	$\frac{1}{4}$ ounce
Glycerine	.	.	.	1 teaspoonful

EXTRACT OF STRAWBERRY.

Alcohol	.	.	.	2 ounces
Acetic Ether	.	.	.	10 drops
Nitrous Ether	.	.	.	30 drops
Farmac Ether	.	.	.	10 drops

Butric Ether . . .	30 drops
Oil of winter green . .	10 drops
Amyl Acitrate . . .	30 drops
Amyl Butyrate . . .	20 drops
Glycerine	30 drops

Mix well.

EXTRACT OF BANANNA.

Aldehyd	10 drops
Amyl Butyrate . . .	$\frac{1}{4}$ ounce
Butric Ether. . . .	1 teaspoonful
Chloroform	10 drops
Glycerine	30 drops
Alcohol	2 ounces

Mix.

VINEGAR.

(DILUTE ACETIC ACID.)

A large amount of so called vinegar is placed on the market to day, at a cost of about ten cents per barrel, this vile compound is positively dangerous, and the manufacturer should be placed behind stone walls and iron bars.

Sulphuric and nitric acid is used with water, coloring and flavor.

Below we give some formulas for making vinegar by the quick process, that may be used in the household without danger.

CIDER VINEGAR.

Water	.	.	.	1 gallon
No. 8 Acetic acid.	.	.	.	1 pint
Sugar coloring	.	.	.	1 teaspoonful

Mix.

To the above 10 drops of apple essence may be added, to give it more of the apple flavor.

PEAR VINEGAR.

Water	.	.	.	1 gallon
No. 8 Acetic acid.	.	.	.	1 pint
Essence of Pear	.	.	.	10 drops

Mix.

WHITE WINE VINEGAR.

Water	.	.	.	1 gallon
No. 8 Acetic acid.	.	.	.	1 pint

Mix.

STRAWBERRY VINEGAR.

Water	6 quarts
No. 8 Acetic acid	1 pint
Extract of Strawberry	10 drops
Color Red.	

BAKING POWDER.

It is safe to say, that where one good baking powder is sold, there are many dangerous preparations forced on the public. Many of these are made up largely of alum and ammonia.

The following may be used without danger.

Tartaric acid	2 ounces
Cream of tartar	1 ounce
Bicarbonate of soda	4 ounces
Corn starch	6 ounces

Mix.

Cream of tartar	2 ounces
Bicarbonate of soda	2 ounces
Potato starch	4 ounces

Mix.

Tartaric acid	8 ounces
Bicarbonate of soda	10 ounces
Potato starch	12 ounces

Mix.

FRENCH MUSTARD.

We will say right here, that very little of this so-called mustard contains any mustard whatever. In fact it is composed mostly of buck wheat flour and potato starch, with capsicum and color.

The formulas we give here are good and make a nice condiment.

Buck wheat flour . . . 1 pound

Dry mustard . . . $\frac{1}{4}$ pound

Mix with vinegar and color with sugar coloring.

Potato starch . . . 1 pound

Dry mustard . . . $\frac{1}{2}$ pound

Mix with white wine vinegar, color with sugar coloring.

TREATMENT FOR OBESITY.

(REDUCING FLESH.)

During the past years we have examined many preparations that were sold under fancy and high sounding names, and claiming to cure corpulency, and a large number of the preparations were found to be worse than useless, and

in many instances positively dangerous. The man or woman who is carrying about too much fat is in great danger. And while too much fat is dangerous it is a constant annoyance and burden in every way.

This treatment is an honest, intelligent and successful one and we guarantee it in every respect. You incur no danger in taking it, you suffer no inconvenience, no pain or trouble whatever.

THE TREATMENT.

Powdered Rhubarb 1 ounce

Compound licorice powder ½ ounce

Mix and make into 3 grain capsules.

Dose, one 20 minutes before each meal.

Pulverized citric acid 1 ounce

Water 1 pint

Dissolve and take one teaspoonful in one half glassful of water when thirsty.

Take a hot salt bath once a week, before bed time. Say 1 pint of salt dissolved in 10 gallons of water. Avoid constipation, exercise short of fatigue.

SUGGESTIONS for OBESITY DIET.

SOUPS, ETC.

Beef, mutton, and chicken broth, free from fat.

FISH.

All kinds.

MEATS.

Lean beef, lean mutton, chicken and game. Eggs.

VEGETABLES.

Asparagus, cauliflower, onions, celery, cresses, spinach, white cabbage, tomatoes, radishes, lettuce, greens, squash and turnips.

BREAD AND FARINACEOUS ARTICLES.

Stale bread and dry toast, gluten biscuits.

DESSERTS, FRUITS, ETC.

Grapes, oranges, cherries, berries, acid fruit.

DRINKS.

Water, tea and coffee without sugar or cream. Saccharine syrup may be used in tea and coffee.

AVOID

Fat, thick soups, sauces, spices, hominy, oat meal, macaroni, white and sweet potatoes, rice, beets, carrots, starches, parsnips, puddings, pies, cakes, all sweets, milk, alcoholic drinks, malt liquors. Avoid water in excess.

TREATMENT FOR THE DRINK HABIT.

There are many institutions in this country who claim to treat and cure drunkenness, most of them are humbugs and not worthy of any consideration whatever.

We have made a careful analysis of the preparations used in quite a number of these institutions, and found them to be something like the following:

THE TONIC.

Cinchona, Nux Vomica, Atropine and Ammonia.

THE INJECTION.

Atropine or Strychnine and sometimes both.

These humbug institutions claim that their treatment will remove all desire for intoxicants. In fact take our treatment they cry and you can't drink whiskey if you try, any way you can't keep it down. And all this is very true, should you drink the whiskey or beer they give you while undergoing treatment, because they contain drugs of such a nature, which makes it impossible for the stomach to retain them.

Perhaps John Soak, after being treated a few days is given a test, as it is called, that is a drink of whiskey or beer if he prefers it, this whiskey or beer contains ipecacuanha or appia morphia, and, as a result, in a few minutes John has a most violent fit of vomiting, "Oh, Oh," he gasps, "this treatment has fixed me, I can't drink any more whiskey." After he leaves the institution the thought

of how he suffered after taking these tests will keep him sober for at least a week, while in some cases (but very rare) for years.

HOME CURE FOR DRUNKENNESS.

Fluid extract of cinchona	1	ounce
Nux Vomica . . .	$\frac{1}{8}$	ounces
Atropine . . .	$\frac{1}{2}$	grain
Aromatic spirits of ammonia	$\frac{1}{8}$	ounces
Simple syrup . . .	2	ounces
Water to make . . .	8	ounces

Dose, one teaspoonful every three hours.

The above has been taken in a large number of cases with good results, where nerves and stomach are in poor condition, this tonic helps wonderfully.

TREATMENT FOR EMACIATION.

(TO BUILD UP FLESH.)

THE TONIC.

Iron tincture . . .	$\frac{1}{2}$	ounce
Water . . .	5	ounces
Simple syrup . . .	2	ounces
Fowler's solution of arsenic	$\frac{1}{8}$	ounce
Dilute phosphoric acid	$\frac{1}{8}$	ounce
Mix.		

One teaspoonful after meals.

MALT EXTRACT.

One tablespoonful one hour before meals.

Take moderate exercise, keep regular hours, avoid excesses. For bath, use sponge and tepid water.

WHAT TO EAT.

Oat meal, corn meal, rice, hominy, wheat, starches, jellies, puddings, bread, biscuits, potatoes, carrots, beets, fat meats, thick soups, sugar, milk, cream, sweet fruits, avoid alchohlic and malt liquors and all sour matter.

BEER.

The consumption of beer in the United States has grown to enormous proportions, as the quantity of beer increases the quality decreases, until much of the output is slop and nothing better. Lager beer is supposed to be made from barley and hops and to contain four per cent. alcohol. Glucose being much cheaper than malt made from barley, and extract

of bitter aloes is cheaper than hops, therefore these are largely used.

As an anti-ferment Salicylic acid is used in large quantities. Therefore much of the beer sold to-day is positively dangerous and is a fruitful cause of the production of many diseases.

Many who drink beer claim that it makes them strong, and that it is a food. This is all bosh, in a barrel of beer there is not as much nutriment as in a single loaf of rye bread.

BAY RUM.

A large amount of the liquid sold under this name is only a base imitation, and unfit for use.

In glass jar or crock:

Bay leaves	.	.	4 ounces
Alcohol	.	.	1 pint
Water	.	.	1 quart

Keep well covered and allow to stand six days, stirring two or three times each day.

Filter through paper, or two or three times with cotton flannel.

HAIR RESTORER.

Lac Sulphur . . .	1 ounce
Acitrate of Lead . . .	$\frac{1}{2}$ ounce
Alcohol	8 ounces
Common salt	$\frac{1}{4}$ ounce
Bay Rum	2 ounces
Water to make	$\frac{1}{2}$ gallon
Pumice stone	2 ounces

Shake well and filter through paper.

DANDRUFF CURE.

Water	1 quart
Alcohol	8 ounces
Hydrochloric Acid	$\frac{1}{8}$ ounce
Sulphate of Quinine	$\frac{1}{8}$ ounce
Tincture of Canthardis	$\frac{1}{8}$ ounce
Bay Rum	4 ounces
Pumice stone	2 ounces

Shake well, filter through paper.

QUININE TONIC.

Water	1 quart
Alcohol	8 ounces
Sulphate of Quinine	$\frac{1}{8}$ ounce
Tincture of Canthardis	$\frac{1}{8}$ ounce
Extract of Rose	$\frac{1}{2}$ ounce

Pumice stone . . . 2 ounces
Shake well, filter through paper.

Color red.

ROSE TOILET WATER.

Essence of Rose . . . 1 ounce
Alcohol . . . 8 ounces
Water . . . 1 quart
Pumice stone . . . 2 ounces
Shake well, filter through paper.

Color pink.

VIOLET TOILET WATER

Alcohol . . . 8 ounces
Extract of Violet . . . ½ ounce
Water . . . 1 quart
Pumice stone . . . 2 ounces
Shake well filter through paper.

Color with violet color or ink.

LILAC TOILET WATER.

Alcohol . . . 8 ounces
Extract of Lilac . . . ½ ounce
Water . . . 1 quart
Pumice stone . . . 2 ounces
Shake well, filter through paper.

Color with violet coloring.

ROSE PERFUME.

Alcohol	.	.	.	2 ounces
Oil of Rose	.	.	.	10 drops

Shake well, color pink.

HONEY SUCKLE PERFUME.

Alcohol	.	.	.	2 ounces
Oil of Rose	.	.	.	5 drops
Oil of Lemon	.	.	.	10 drops
Oil of Orange	.	.	.	10 drops
Oil of Burgamot	.	.	.	10 drops
Oil of Lavender	.	.	.	2 drops

Shake well, color yellow.

SWEET LAVENDER PERFUME.

Alcohol	.	.	.	2 ounces
Oil of Lavender flower	.	.	.	$\frac{1}{8}$ ounce

NEW MOWN HAY PERFUME.

Alcohol	.	.	.	2 ounces
Oil of Myrrhbane	.	.	.	10 drops
Oil of Lemon Grasse	.	.	.	20 drops
Extract of Vanilla	.	.	.	10 drops

Shake well.

VIOLET PERFUME.

Alcohol . . .	2 ounces
Oil of Violets . .	10 drops
Extract of Orris . .	5 drops
Shake well, color violet.	

GERMAN COLOGNE.

Alcohol . . .	2 ounces
Oil of Lemon Grasse .	20 drops
Oil of Burgamot .	20 drops
Oil of Orange . . .	10 drops
Oil of Rose . . .	2 drops
Oil of winter green .	2 drops
Shake well, filter through paper.	

NOTE: The above perfumes would be much cleaner and brighter, by the addition of a little Pumice stone, and filtering through paper.

FACE POWDER.

Powdered carbonate of magnesia . . .	1 ounce
Rose perfume . . .	30 drops

Mix well.

FACE POWDER PINK.

Carbonate of magnesia	1 ounce
Carmine	10 grains

Mix well.

TOOTH POWDER.

Orris powder	1 ounce
French chalk	1 ounce

Mix, perfume.

TOOTH POWDER No. 2.

Orris powder	1 ounce
Powdered Pumice stone	$\frac{1}{2}$ ounce

Mix.

TOOTH POWDER No. 3.

Take Pulverized French Chalk.

INKS.

SHOE MAKERS' INK.

(Or burnishing ink.)

In kettle over fire,

Water	1 gallon
Extract of logwood	4 ounces

When dissolved add,

Bi-Chromate of Potash	$\frac{1}{2}$ ounce
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Stir for two or three minutes, take off fire and when cool add,

Vinegar	1 pint
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The above costs ten cents per gallon and sells for about one dollar.

HARNESS INK.

In kettle over fire,

Water	1 gallon
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Extract of Logwood	.	4 ounces
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When dissolved add,

Bi-Chromate of Potash		½ ounce
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Yellow Prussiate of Potash		30 grains
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Stir until dissolved, take off fire and when cool add

No. 8 Acetic acid	.	4 ounces
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BLACK WRITING INK.

In kettle over fire

Water	6 quarts
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Extract of logwood	.	4 ounces
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When dissolved add,

Bi-Chromate of Potash		1 ounce
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Stir until dissolved, allow to cool and it is ready for use.

The above costs about 10 cents per gallon and sells for two dollars.

BLACK WRITING INK No. 2.

Black water soluble Aniline	1 ounce
Boiling water	1 gallon
Stir until dissolved, when cool add	
Acetic acid	2 ounces

PURPLE INK.

Boiling water	1 gallon
Purple or Violet water	
soluble Aniline	1 ounce
Acetic acid	2 ounces

Stir until dissolved.

Costs about 15 cents, sells for 75 cents to one dollar per quart.

RED BLUE and GREEN INKS.

Make same as purple, using Red, Blue or Green Aniline in place of Purple Aniline.

MUCILAGE.

(THE KIND USED ON POSTAGE
STAMPS.)

Water	10 ounces
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Dexterine . . .	8 ounces
Acetic Acid . . .	2 ounces
Mix well, and add	
Alcohol . . .	2 ounces
Mix.	

MUCILAGE No. 2.

Gum Tragacanth . . .	1 ounce
Cold water . . .	½ gallon
Allow to stand 24 hours stirring well a few times.	

If too thick add water.

LAUNDRY BLUING.

Soluble blue . . .	1 ounce
Oxalic acid . . .	1 ounce
Water . . .	1 gallon
Allow to stand 48 hours, stirring well a few times.	

Strain through cloth.

The above makes a good blue ink
as well.

STARCH POLISH.

White wax . . .	1 ounce
Spermaceti . . .	1 ounce

Melt together, about $\frac{1}{8}$ ounce to quart of
starch.

STARCH POLISH No. 2.

White wax	.	.	1 ounce
Spermaceti	.	.	2 ounces
Sterine	.	, ,	$\frac{1}{2}$ ounce

Melt together.

HARNESS DRESSING.

Wood Alcohol (Poison)	1 quart
Garnet shellac	$\frac{1}{2}$ pound
Cotton seed oil	$\frac{1}{4}$ ounce

Keep well covered, stirring well three times each day for four days, or until dissolved, then add

Black water soluble Aniline 1 ounce
Stir well and it is ready for use.

BLACK SHOE DRESSING.

(WATERPROOF)

Same way as Harness Dressing.

RUSSET SHOE or HARNESS DRESSING.

Same way as black only leave out the color.

RUSSET SHOE CLEANER.

Water 1 gallon

Gum Tragacanth 4 ounces

Allow to stand 24 hours, stirring a few times, then add

Oxalic Acid 4 ounces

Allow to stand 12 hours stirring a few times, then add

Red water soluble Aniline 20 grains

Dissolved in a little water, add

Spirits of Camphor $\frac{1}{2}$ ounce

Mixing well.

Water now may be added to bring it to the right consistency.

BLACK SHOE POLISH.

In kettle over fire dissolve

Black burnishing wax 4 ounces

In covered can,

Turpentine 8 ounces

Place the can in a vessel containing water, over fire until the Turpentine becomes hot, then mix the wax and turpentine together.

Allow to cool, say one half, then pour into cans that have tight fitting covers.

RUSSET SHOE POLISH.

Make same way as black, using yellow burnishing wax in place of black.

LIQUID GLUE.

In can or crock,

Acetic acid	.	.	1 pint
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Best white glue	.	½ pound
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Place can in water over fire until dissolved.

CEMENT THAT WILL MEND ANYTHING.

In kettle over fire,

Acetic acid	.	.	1 pint
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French Isinglass	.	½ pound
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Stir until dissolved.

Bottle while hot.

PIANO POLISH.

Linseed oil	.	.	4 ounces
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Alcohol	.	.	4 ounces
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Balsam of Fir	.	.	½ ounce
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Sulphuric Ether	.	¼ ounce
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Shake well.

Place on with woolen cloth.

The above polish is the best on earth.

ELECTRIC POWDER.

For cleaning copper, brass, gold, silver and glass,

Best whiting	.	.	1 pound
Cream of Tartar	.	.	1 ounce
Calcined magnesia	.	.	1 ounce

Mix.

Rub on with damp cloth, and polish with dry one.

SEALING WAX.

In kettle over fire,

Bees wax	.	.	.	2 ounces
Rosin	.	.	.	4 ounces
Turpentine	.	.	.	1 ounce
Venetian red	.	.	.	$\frac{1}{4}$ ounce

Dissolve.

SILVER-PLATING FLUID.

Nitrate of Silver	.	.	$\frac{1}{4}$ ounce
Cyanide of Potassium	.	.	3 ounces
Distilled water	.	.	4 ounces

Shake until dissolved, then add

Whiting	.	.	.	1 ounce
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Rub on with cloth.

BEST MATCHES.

In mortar,

Water	. . .	10 grains
Dexterine	. . .	2 grains
Chlorate of Potash	.	2 grains
Red lead	. . .	2 grains
Peroxide of Manganese		3 grains
Golden Sulphide of Antimony		2 grains
Amorphous Phosphorous		3 grains

Mix well.

Dip sticks in the above and allow to dry.

NOTE: The above preparation is dangerous to make, it will explode while mixing if dry. The writer received \$2500.00 for this formula.

TO REMOVE INK FROM PAPER.

Chlorate of lime	.	1 pound
Water	. . .	1 gallon

Shake well, allow to stand 24 hours, and strain through cloth.

To one ounce of the above add

Acetic acid	. . .	1 teaspoonful
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REPRODUCE.

For transferring pictures from newspaper, magazines, etc.,

Water	. . .	1 pint
Turpentine	. . .	4 ounces
Sulphuric Ether	. . .	$\frac{1}{2}$ ounce
Potash (Babbitts)	. . .	10 grains
Soap Powder	. . .	$\frac{1}{2}$ ounce

Shake well.

Wet the picture with brush, dry a little with blotting paper, then place on picture your blank paper, and rub with spoon.

The above formula is very valuable.

FLASH LIGHT POWDER.

For taken pictures at night the following flash light is safe, cheap, and there is no better sold.

Powdered sulphur	. . .	30 grains
Yellow prussiate of potash	. . .	60 grains
Chlorate of potash	. . .	180 grains
Powdered metal magnesium	. . .	120 grains
Powder each chemical separately and mix together.		

GUN POWDER.

Will throw No. 6 shot one hundred yards, and kill birds.

Chlorate of potash	.	1 ounce
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Yellow Prussiate of potash		$\frac{1}{2}$ ounce
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Granulated sugar	.	$\frac{1}{2}$ ounce
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Nitrate of potash	.	20 grains
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Red lead	.	$\frac{1}{8}$ ounce
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Pulverize each chemical separately then mix together.

WEIGHTS and MEASURES.

DRY MEASURE.

20 grains	.	1 scruple
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3 scruples	.	1 drachm
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8 drachms	.	1 ounce
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12 ounces	.	1 pound
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FLUID MEASURE.

60 minims or drops	.	1 drachm
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8 drachms	.	1 ounce
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16 ounces	.	1 pint
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8 pints	.	1 gallon
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Medicines are bought and sold by avoirdupois weight.

PERCENTAGE OF ALCOHOL IN VARIOUS BEVERAGES.

Beer	.	.	.	.	.	4.
Porter	.	.	.	.	.	4.5
Ale	.	.	.	.	.	7.4
Cider	.	.	.	.	.	8.6
Maselle	.	.	.	.	.	9.6
Perry	.	.	.	.	.	8.8
Elder	.	.	.	.	.	9.3
Tokay	.	.	.	.	.	10.2
Orange	.	.	.	.	.	11.2
Bordeau	.	.	.	.	.	11.5
Hock	.	.	.	.	.	11.6
Goosberry	.	.	.	.	.	11.8
Champagne	.	.	.	.	.	12.2
Claret	.	.	.	.	.	13.3
Burgundy	.	.	.	.	.	13.6
Malaga	.	.	.	.	.	19.3
Canary	.	.	.	.	.	18.8
Sherry	.	.	.	.	.	19.
Vermouth	.	.	.	.	.	19.
Cape	.	.	.	.	.	19.2
Malmsey	.	.	.	.	.	19.7
Marsala	.	.	.	.	.	20.
Ratafia	.	.	.	.	.	21.

PERCENTAGE OF ALCOHOL IN VARIOUS BEVERAGES.—Con.

Port	.	.	.	.	.	23.
Curacoa	.	.	.	.	.	27.
Aniseed	.	.	.	.	.	33.
Maruschino	.	.	.	.	.	34.
Chartreuse	.	.	.	.	.	43.
Gin	.	.	.	.	.	51.6
Brandy	.	.	.	.	.	53.4
Rum	.	.	.	.	.	57.7
Irish whiskey	.	.	.	.	.	53.9
Scotch whiskey	54.3

Spirits are said to be proof, when they contain 57 per cent.





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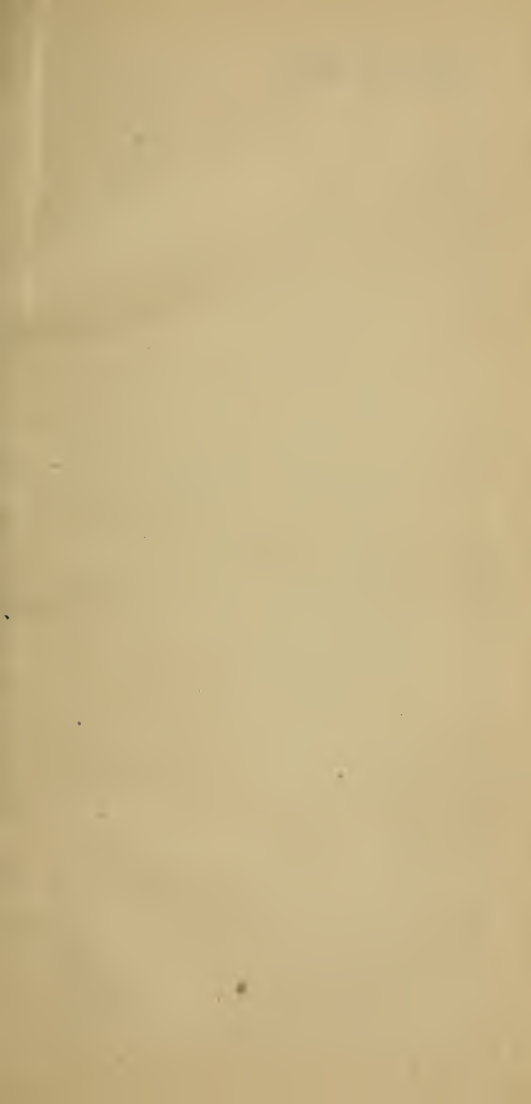
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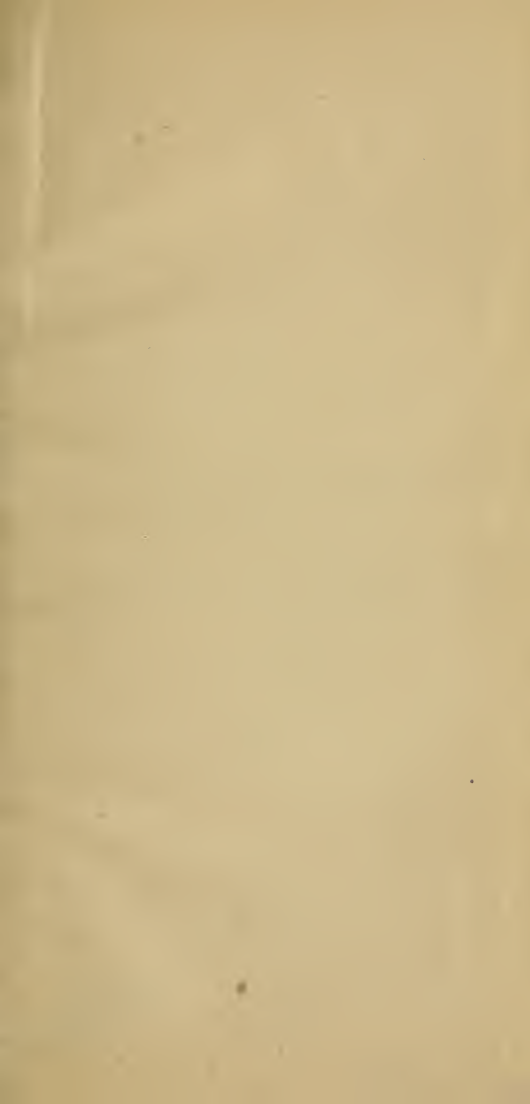
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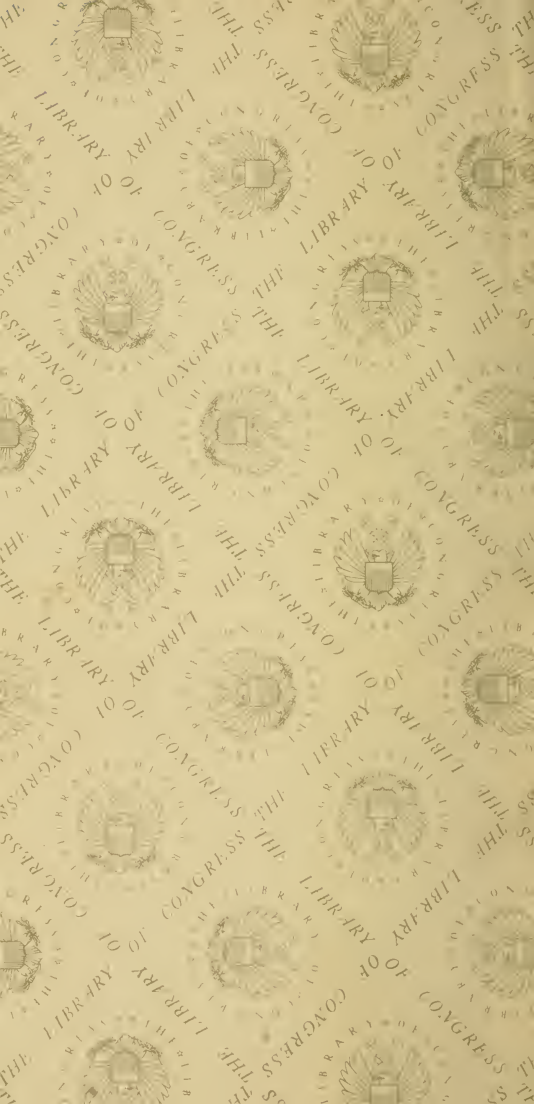


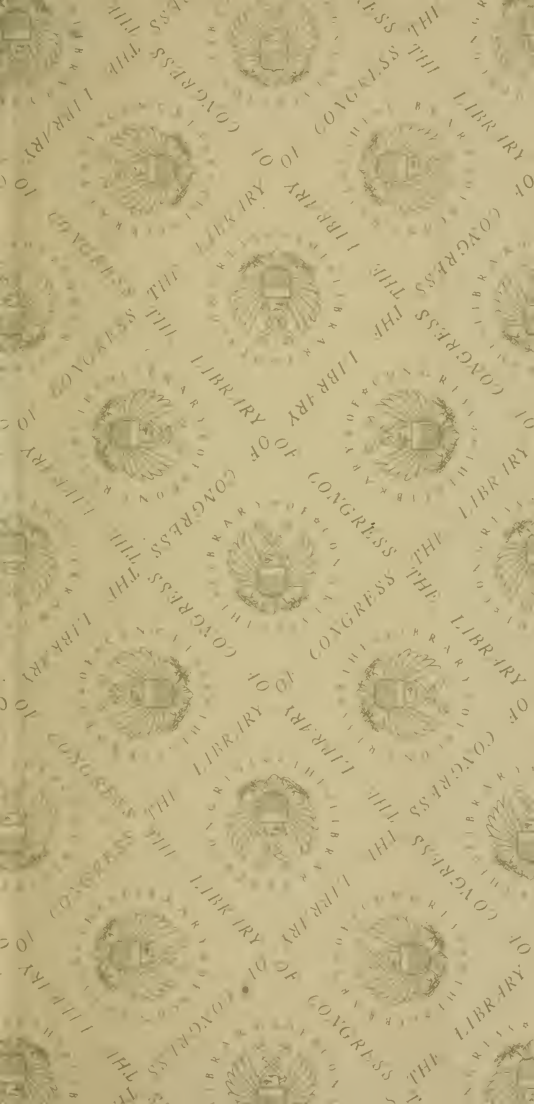












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